

## 108. On a New Ordovician Nautiloid Genus *Sinoceras*.

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The genus *Orthoceras* was established by Breynius in 1732, a pre-Linnean date, thus making it invalid as already pointed out by Troedsson (1, p. 12, 1931). According to him, the authority to the genus *Orthoceras* must be attributed to Blainville, and the genotype is *Orthoceras regulare* Schlotheim from the Lower Ordovician of the Baltic region.

Troedsson redescribed the genus as follows;

"Straight orthoconic shells with longitudinal impressions of the living-chamber. Exterior sculptured with transverse lines of growth, forming a banding somewhat similar to that in *Geisonoceras* but the bands are composed of densely crowded minute longitudinal ribs, which are especially well shown on a slightly weathered surface. Apertural angle small. Air chambers and siphuncle of medium size; siphuncle central or subcentral."

The well known *Orthoceras chinense* Foord from the Middle Ordovician deposit of China differs markedly from the genotype of *Orthoceras* in characters taken by us to be of generic distinction. In spite of this difference, previous workers have failed to notice the separation of this species, thus causing frequent mistakes in generic identification of the Chinese form, even in the last few years. The more important data in this regard are those of Woodward (2, p. 378, pl. VI, fig. 1), Foord (3, p. 100), Frech (4, p. 8, pl. 11, figs. 2 a-c), Yabe and Hayasaka (5, p. 48, pl. XXVII, figs. 3 a-b), Yü (6, p. 46, pl. 111, figs. 7 a-c; pl. VI, figs. 1 a-b, 2 a-c), Kobayashi (7, p. 401, pl. XXXII, fig. 7), and others.

As is shown by the following description, there are two important characters distinguishing *O. chinense* from the other species in the genus. These two characters make the species *O. chinense* (Foord) the genotype of the genus *Sinoceras* here proposed. (Genoholotype, a specimen figured by Yü (6, pl. VI, figs. 2 a-b).

The new genus *Sinoceras* takes the following characteristics;

Shell straight orthoconic, subcylindrical and orthochoanitic with very long septal necks. Surface of shell ornamented with prominent transverse flexuous striae, forming downward sinus on one side (ventral?), in bands of two or four stronger striae alternating with two or four weak striae.

The largest specimen of *Sinoceras chinense* (Foord) seen by one of us (Shimizu) in the collection of the British Museum (Natural History), is ca. 2 ft. 6 in. long.

*Sinoceras* is distinguishable from *Orthoceras* (s.s.), in having peculiar impressions of the body chamber, much shorter septal necks, and less prominent and less flexuous striae. From *Geisonoceras* it is dis-

tinguished in its longer septal necks and somewhat different type of ornamentation.

#### Literatures.

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